# New Hampshire's Water Conservation Program

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## "Water conservation" means any beneficial reduction in water losses, waste, or use.

#### Conservation measures include:

- Education that results in behavior modification
- Installing water efficient hardware (new, replacement and retrofits)
- Improving and maintaining infrastructure
- Improve water use management and accounting

# Water Conservation The Greatest Untapped Resource

Average potential water savings achievable from water efficiency measures:

- Businesses: 15-50%, with 15-35% being typical (Payback periods are usually between 1 and 4 years, with the typical time less than 2.5 years)
  - See NH Water Efficeincy Case Studies: www.des.state.nh.us/studies
- Residential Water Use: Approximately 35% for indoor water use.

Source (Water Use and Conservation Handbook – www.waterplowpress.com)

#### Water Conservation in New Hampshire

- 83% of the water systems implement either no or very limited water conservation measures.
- 70% of businesses implement no or very limited water conservation measures.

## Who Is Concerned About Future Water Supply Shortages in New Hampshire?

49% of the Community Water Systems

46% of Businesses Using >20k gal/day

July 1998 Large Groundwater Withdrawals: Laws adopted requiring all new Large Groundwater Withdrawals develop a Water Conservation Management Plan (RSA 485-C:4, XII(b) & 485:3, XIII(b)) (www.gencourt.state.nh.us/legislation/1998/SB 0374.html)

June 2000 Regulatory Barrier Study: Law adopted requiring DES and PUC to complete a study to identify barriers to implementing water conservation (www.gencourt.state.nh.us/legislation/ 2000/ SB0331.html)

Jan 2001 Rate Making Policy: PUC opens Docket DW 01-253-Water Investigate Conservation Rate Structures & Incentives

- April 2001 Adopt Large Groundwater
  Withdrawal Regulations as required by
  law with Conservation Management
  Plan requirements (Env-Ws 387 and 388)
  (www.des.state.nh.us/dwspp/lgwith.htm)
- Aug 2001 DES and PUC completed the Regulatory Study and Report to the Legislature (www.des.state.nh.us/pdf/Report\_DES-PUC.pdf)
- April 2002 Radio Announcements: DES issues public service announcements on radio promoting and encouraging water conservation

May 2002 Law adopted requiring DES to develop Water Conservation Rules (www.gencourt.state.nh.us/legislation/2002/SB0 440.html)

#### Summer

2002

DES prepares 17 Water Conservation Fact Sheets and 4 New Hampshire Water Conservation Case Studies (www.des.state.nh.us/h2o\_conservation.htm)

#### Summer

2002

DES Develops a Model Water Use Restriction Ordinance (www.des.state.nh.us/pdf/wateruserestrictions.pdf)

Nov 2002 DES and WasteCapNH Conducted a 2 day Water Conservation Workshop for Businesses, Industries, and Institutions

(www.wastecapnh.org/workshops/water.asp)

May 2003 DES Prepares Draft Water Conservation Rules

Ongoing Convene Water Conservation Rulemaking Advisory Committee

Ongoing Proposed Drought Management Plan Legislation (www.gencourt.state.nh.us/legislation/2003/SB0 064.html)

**Ongoing Implement Water Conservation at DES** 

**Future** Adopt Water Conservation Rules

Future Develop Model Water Conservation Landscaping Ordinance(s) and Guideline(s)

#### **Large Groundwater Withdrawals**

All groundwater withdrawals from wells installed after July 1998 that exceed 57,600 gallons over any 24-hour period must develop and submit a Conservation Management Plan to DES for review and approval

#### Laws

RSA 485-C:4, XII(b) & 485:3, XIII(b) – July 1998 (www.gencourt.state.nh.us/legislation/1998/SB0374.html)

#### Regulations

Env-Ws 387.05 & Env-Ws 388.05 – April 2001 (www.des.state.nh.us/dwspp/lgwith.htm)

#### Forms

(www.des.state.nh.us/dwspp/lgwithques.rtf)

## Water Conservation Regulatory Barrier Study

- Law passed in June 2000 requiring DES and PUC to complete a study to:
  - 1) Identify regulatory barriers to implementing water conservation
  - 2) Make recommendations to the Legislature to remove these barriers

(www.gencourt.state.nh.us/legislation/2000/SB0331. html)

• Report was completed in August 2001 (www.des.state.nh.us/pdf/Report\_DES-PUC.pdf)

# Water Conservation Regulatory Barrier Study (continued)

#### **Study Findings:**

- 1) NH needs a State Policy on Water Conservation
- 2) DES should develop public outreach initiatives
- 3) PUC should develop incentives to encourage water conservation
- 4) DES should develop a model water use restriction ordinance

## Development of a State Policy on Water Conservation

Senate Bill 440 (RSA 485:61-a) — Passed May 02 (www.gencourt.state.nh.us/legislation/2002/SB0440.html)

- 1) Defines water conservation for the State of NH
- 2) Requires that DES develop water conservation rules that new withdrawals must comply with

### 485:61 Rules for Water Conservation

I. The department shall adopt rules, pursuant to RSA 541-A, for water conservation practices for water users. These rules shall strike a reasonable balance between environmental, energy, and economic impacts and be consistent with current industry standards and practices for different types of water users.

## 485:61 Rules for Water Conservation (continued)

II. The water conservation rules in paragraph I of this section shall apply to all new permit applicants and applications for water withdrawals subject to the provisions of RSA 485:3, RSA 485:48, RSA 485-C:21 and section 401 of the Clean Water Act.

## 485:61 Rules for Water Conservation (continued)

III. Water conservation rules shall be consistent with applicable state or federal rules and regulations.

Initial draft rule has been prepared and rulemaking advisory committee will begin meeting in <u>June 2003</u>.

Contact Brandon Kernen at 271-0660 or bkernen@des.state.nh.us if you would like to participate

#### **Public Outreach Initiatives**

- 17 Water Efficiency Factsheets (www.des.state.nh.us/h2o conservation.htm)
- Water Conservation Brochure
- 4 Water Conservation Case Studies (www.des.state.nh.us/h2o\_conservation.htm)
- Numerous Press Releases and Interviews
- Radio Public Service Announcements
- Numerous Public Speaking Events (towns, regional planning agencies, & conferences)
- Water Conservation Workshop for Health Care Facilities and Businesses and Industries – November 12 and 13, 2002

(www.wastecapnh.org/workshops/water.asp)

#### **PUC Water Conservation Incentives**

#### PUC Docket DW 01-253

Participants in the docket have recommended that the PUC Commissioners pursue the implementation of the following initiatives:

- 1) Seasonal Rate Structures
- 2) Water Use Restriction Tariffs
- 3) Pre-Approved List of Rate Recoverable Water Conservation Measures
- 4) Legislative Assessment of the feasibility of a Statewide "Pay As You Save" (PAYS) Program

#### **Model Water Use Restriction Ordinance**

A model ordinance has been developed that provides:

- 1. Optional third party verification from DES to gain public confidence.
- 2. Provides water suppliers with technical assistance in implementing water use restrictions.
- 3. Offers tiered approach to restricting water use.

(www.des.state.nh.us/pdf/wateruserestrictions.pdf)

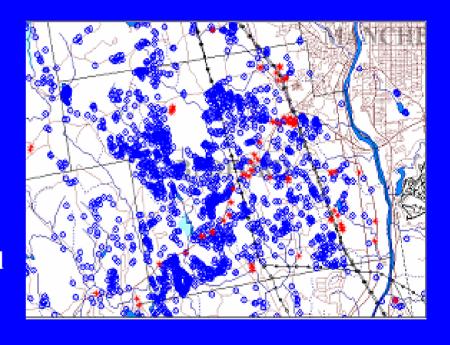
#### Water Use Restrictions (continued)

Water Use Restrictions for Privately Owned Wells (wells not regulated as a community or PUC utility)

- Except for the emergency powers of the Governor, no clear mechanisms to restrict water use during times of drought for private well owners
- Many communities and public water suppliers indicate that there should be a way to legally restrict discretionary water use of private wells during times of water supply shortages

#### Water Use Restrictions (continued)

- 1/3 of New Hampshire's residents obtain water from a privately owned domestic well
- Private wells can occur in densely populated areas (blue dots) and in close proximity to Public Water Supply Wells (red dots)
- Majority of private wells are installed in bedrock aquifers



Current State laws only allow municipalities or water systems to adopt ordinances to restrict water use during a water supply emergency for customers of community water systems

#### Water Use Restriction/Drought Management Plan

Current Legislation: SB-064 – "Relative to updating the drought management plan" - Voted Inexpedient to Legislate - 5/14/03

As currently proposed, requires:

- 1) Agencies to update the Drought Management Plan
- 2) Make recommendations to the legislature

SB-064 specifically requires agencies consider the following:

- "I. Evaluation of the existing procedures for reducing water withdrawals in times of drought, including a plan which prioritizes reductions in withdrawals.
- II. Evaluation of the need for authority to allow municipalities to require the imposition of conservation measures in times of drought."

# Water Use Restriction/Drought Management Plan (continued)

#### Text of SB-064:

www.gencourt.state.nh.us/legislation/2003/SB0064.html

## DES Letter of SB-064 Letter of Testimony:

www.des.state.nh.us/testimony/2003/SB64-FN.htm

## Current Drought Management Plan www.des.state.nh.us/dam/droughtmanplan.pdf

#### **New Water Conservation Initiatives**

Development of the following guidance documents:

- Landscaping Guidelines (homes, recreational fields, and other turf areas)
- Model Water Conservation Landscaping Ordinance

Similar guidance documents already exist for other northeastern states:

- MA Guide to Lawn and Landscape Water Conservation (www.state.ma.us/envir/mwrc/pdf/LawnGuide.pdf)
- Landscaping for Water Conservation: A Guide for New Jersey (www.rce.rutgers.edu/pubs/pdfs/e080.pdf)